PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference QPCZ2 00041 PCT	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US04/06123	International filing date (*day/month/year*) 01 March 2004 (01.03.2004)	(Earliest) Priority Date (*day/month/year*) 24 September 2003 (24.09.2003)
Applicant Q-PANEL LAB PRODUCTS CORPORATION		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the Report**
   a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
      ☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
   b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2. ☐ **Certain claims were found unsearchable** (See Box No. II)
3. ☐ **Unity of invention is lacking** (See Box No. III)
4. With regard to the **title**,
   ☒ the text is approved as submitted by the applicant.
   ☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,
   ☐ the text is approved as submitted by the applicant.
   ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,
   a. the figure of the drawings to be published with the abstract is Figure No. 1
      ☒ as suggested by the applicant.
      ☐ as selected by this Authority, because the applicant failed to suggest a figure.
      ☐ as selected by this Authority, because this figure better characterizes the invention.
   b. ☐ none of the figures is to be published with the abstract.

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Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

NEW ABSTRACT

An accelerated weather testing apparatus includes a test chamber, a lamp (16), a dispenser (18,20), and a specimen support (14). The lamp is capable of generating UV radiation and directing the radiation towards the specimen support. The dispenser connects to an associated liquid source to dispense either water or acid or both. The specimen support is disposed in the test chamber below the lamp and the dispenser.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : G01N 17/00; G01D 18/00
US CL : 250/504R, 492.1; 73/865.6
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 250/504R, 492.1; 73/865.6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,285,137 (GROSSMAN et al) 04 September 2001 (04.09.2001), see entire document.	1-11,13-25,27-34
Y	US 5,476,636 (TOMIITA et al) 19 December 1995 (19.12.1995, see entire document.	1-11,13-25,27-34
Y	US 4,012,954 (KLIPPERT) 22 March 1977 (22.03.1977), see entire document.	11
Y	US 2002/0139928 (RATHOD et al) 03 October 2002 (03.10.2002), see entire document.	1-11,13-25,27-34
Y	US 4,817,447 (KASHIMA et al) 04 April 1989 (04.04.1989), see entire document.	1-11,13-25,27-34
Y	US 5,646,358 (TIKHTMAN et al) 08 July 1997 (08.07.1997), see entire document.	1-11,13-25,27-34

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
02 November 2004 (02.11.2004)

Date of mailing of the international search report
28 FEB 2005

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Form PCT/ISA/210 (second sheet) (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
JONATHAN A. WITHROW
FAY, SHARPE, FAGAN, MINNICH & MCKEE
1100 SUPERIOR AVENUE, SEVENTH FLOOR
CLEVELAND, OH 44114-2579

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Applicant's or agent's file reference QPCZ2 00041 PCT	Date of mailing (*day/month/year*) 28 FEB 2005 FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date (*day/month/year*)	Priority date (*day/month/year*)
PCT/US04/06123	01 March 2004 (01.03.2004)	24 September 2003 (24.09.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): G01N 17/00; G01D 18/00 and US Cl.: 250/504R, 492.1; 73/865.6

Applicant

Q-PANEL LAB PRODUCTS CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I — Basis of the opinion
- ☐ Box No. II — Priority
- ☐ Box No. III — Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV — Lack of unity of invention
- ☒ Box No. V — Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI — Certain documents cited
- ☒ Box No. VII — Certain defects in the international application
- ☐ Box No. VIII — Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(*b*) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer John R. Lee Telephone No. (703)-308-0956

Form PCT/ISA/237 (cover sheet) (January 2004)

"DOCKETED"

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 12,26	YES
	Claims 1-11,13-25,27-34	NO
Inventive step (IS)	Claims 12,26	YES
	Claims 1-11,13-25,27-34	NO
Industrial applicability (IA)	Claims 1-34	YES
	Claims NONE	NO

2. Citations and explanations:

Please See Continuation Sheet

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Numeral 12 is missing from figure 1. Numeral 20 is missing from figure 7.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

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Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-2,5-8,15-17 lack an inventive step under PCT Article 33(3) as being obvious over Grossman [6,285,137] in view of Tomiita [5,476,636]. As per claim 1, Grossman [6,285,137] teaches a test chamber, a lamp capable of generating UV radiation in the test chamber, a specimen support disposed in the test chamber for supporting an associated test specimen in at least a substantially horizontal orientation, wherein the specimen support is disposed in relation to the lamp such that radiation emitted from the lamp contacts the associated specimen supported by the specimen support. See Grossman [6,285,137] abstract, figs. 1-2, col. 1 lines 25-65, col. 2 lines 5-50, col. 3 lines 5-67, col. 4 lines 15-45, col. 5 liens 5-25, 60-65, and col. 6 lines 1-5. However, Grossman [6,285,137] does not explicitly state that the apparatus contain a first dispenser adapted to connect to an associated liquid solution source other than water, the first dispenser being disposed in the test chamber, a controller in communication with the first dispenser for controlling the dispenser, wherein the specimen support is disposed in relation to the first dispenser such that liquid dispensed from the first dispenser contacts the associated specimen supported by the specimen support to form drops on the specimen and wherein the specimen support is shaped to allow excess liquid to run off the associated specimen so that the associated specimen is not immersed in the associated liquid solution. Tomiita [5,476,636] does teach the apparatus contain a first dispenser adapted to connect to an associated liquid solution source other than water, the first dispenser being disposed in the test chamber, a controller in communication with the first dispenser for controlling the dispenser, wherein the specimen support is disposed in relation to the first dispenser such that liquid dispensed from the first dispenser contacts the associated specimen supported by the specimen support to form drops on the specimen and wherein the specimen support is shaped to allow excess liquid to run off the associated specimen so that the associated specimen is not immersed in the associated liquid solution. See Tomiita [5,476,636] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 20-67, col. 4 lines 1-60, col. 5 lines 1-67, col. 7 lines 1-10, and col. 9 lines 1-12. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a first dispenser adapted to connect to an associated liquid solution source other than water, the first dispenser being disposed in the test chamber, a controller in communication with the first dispenser for controlling the dispenser, wherein the specimen support is disposed in relation to the first dispenser such that liquid dispensed from the first dispenser contacts the associated specimen supported by the specimen support to form drops on the specimen and wherein the specimen support is shaped to allow excess liquid to run off the associated specimen so that the associated specimen is not immersed in the associated liquid solution in order top allow a clean agent to smoothly flow down the and off the sample without stagnation.

As per claim 2, Grossman [6,285,137] teaches a timer in electrical communication with the lamp, whereby the lamp can be cycled to stimulate day or night. See Grossman [6,285,137] abstract, fig. 2, col. 4 lines 28-38, col. 5 lines 5-25, 60-67, and col. 6 lines 1-5.

As per claim 5, Grossman [6,285,137] teaches the lamp comprising a xenon lamp. See Grossman [6,285,137] abstract.

As per claim 6, Grossman [6,285,137] in view of Tomiita [5,476,636] teach all aspects of the claim except for explicitly stating the specimen support be adapted to support the associated test specimen at an angle less than 10 degrees from horizontal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the specimen support be adapted to support the associated test specimen at an angle less than 10 degrees from horizontal in order to all liquid/fluid to run off the sample and sample holder while still allowing the sample to remain stationary on the support, thereby allowing the sample to be cleaned.

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Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

As per claim 7, Grossman [6,285,137] teaches a dimmer in electrical communication with the lamp to control the irradiance of the lamp and an irradiance sensor disposed in the test chamber and in electrical communication with the dimmer. See Grossman [6,285,137] col. 3 lines 20-40, col. 4 lines 25-40, col. 5 line 60 - col. 6 line 7.

As per claim 8, Tomiita [5,476,636] does teach a temperature sensor (22) disposed in or adjacent the test chamber, a heater (11) in communication with the test chamber, a blower system (14) in fluid communication with the test chamber and a temperature controller in communication with the temperature sensor, the heater and the blower system. See Tomiita [5,476,636] fig. 1, and col. 3 lines 40-68 and col. 4 lines 1-25, 60-65.

As per claim 15, Tomiita [5,476,636] teaches a second dispenser adapted to connect to an associated water source. See Tomiita [5,476,636] fig.1, col. 2 lines 35-55, col. 3 line 40 - col. 4 line 45, col. 5 lines 1-10,48-55, col. 7 lines 1-10, and col. 9 lines 5-10.

As per claim 16, Tomiita [5,476,636] teaches the first dispenser comprising a nozzle for spraying the associated test specimens. See Tomita [5,476,636] fig.1, col. 2 lines 35-55, col. 3 line 40 - col. 4 line 45, col. 5 lines 1-10,48-55, col. 7 lines 1-10, and col. 9 lines 5-10.

As per claim 17,Grossman [6,285,137] teaches a timer in electrical communication with the lamp, whereby the lamp can be cycled to stimulate day or night. See Grossman [6,285,137] abstract, fig. 2, col. 4 lines 28-38, col. 5 lines 5-25, 60-67, and col. 6 lines 1-5.

Claim 9 lacks an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Tikhtman [5,646,358]. As per claim 9, Grossman [6,285,137] in view of Tomiita [5,476,636] teach all aspects of the claim except for explicitly stating that the temperature sensor includes at least one of an air temperature sensor and a black panel sensor. Tikhtman [5,646,358] does teach the temperature sensor including at least one of an air temperature sensor and a black panel sensor. See Tikhtman [5,646,358] col. 2 line 60 - col. 3 line 8, col. 7 lines 1-10, col. 8 lines 30-50, col. 9 lines 35-47, and col. 10 lines 1-15. Therefore it would have been obvious to have the temperature sensor include at least one of air temperature sensor and a black panel sensor in order to aid in determining the actual temperature of the sample during testing.

Claims 3-4,10-11,13-14,18 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Kashima [4,817,447]. As per claim 3, Tomiita [5,476,636] teaches a humidifier in fluid communication with the test chamber. See Tomiita [5,476,636] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 20-67, col. 4 lines 1-60, col. 5 lines 1-67, col. 7 lines 1-10, and col. 9 lines 1-12. However, neither Grossman [6,285,137] nor Tomiita [5,476,636] teach a humidity sensor in or adjacent the test chamber and a humidifier controller in communication with the humidity sensor and the humidifier. Kashima [4,817,447] does teach a humidity sensor in or adjacent the test chamber and a humidifier controller in communication with the humidity sensor and the humidifier. See Kashima [4,817,447] abstract, figs. 1,10, col. 2 lines 40-68, col. 3 lines 20-40, col. 6 lines 25-25, 50-65, col. 7 lines 1-45, 50-67, col. 8 lines 60-68, and col. 11 lines 25-60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a humidity sensor in or adjacent the test chamber and a humidifier controller in communication with the humidity sensor and the humidifier in order to allow one to maintain a stable humidity (specific humidity) in the test chamber.

As per claim 4, Grossman [6,285,137] teaches a timer in electrical communication with the lamp, whereby the lamp can be cycled to stimulate day or night. See Grossman [6,285,137] abstract, fig. 2, col. 4 lines 28-38, col. 5 lines 5-25, 60-67, and col. 6 lines 1-5.

As per claim 10, Tomiita [5,476,636] teaches the blower system includes a blower and damper. See Tomiita [5,476,636] col. 4 lines 20-24.

As per claim 11, Grossman [6,285,137] in view of Tomiita [5,476,636] and further in view of Kashima [4,817,447] teach all aspects of the claim except for explicitly stating the blower system include two blowers. It would obvious to one of ordinary skill in the art at the time the invention was made to have the blower system include two blowers, since a mere duplication of the essential working parts of a device involves only routine skill in the art.

As per claim 13, Tomiita [5,476,636] teaches the controller communicates with the heater in response to data received from the air temperature sensor. See Tomiita [5,476,636] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 20-67, col. 4 lines 1-60, col. 5 lines 1-67, col. 7 lines 1-10, and col. 9 lines 1-12.

As per claim 14, Kashima [4,817,447] teaches the temperature controller being adapted to control the blower system and heater to allow for the cycling of temperature.

As per claim 18, Kashima [4,817,447] teaches a temperature sensor disposed in or adjacent the test chamber, a heater in communication with the test chamber, a blower system in fluid communication with the test chamber and temperature controller in communication with the temperature sensor, the heater and the blower system, wherein the temperature controller is adapted to control the blower system and heater to allow for the cycling of temperature. See Kashima [4,817,447] abstract, figs. 1-2,10, col. 2 lines 40-68, col. 3 lines 20-40, col. 6 lines 20-30, 55-63, col. 7 lines 1-45, and col. 11 lines 45-60.

Claims 19-23,28-31 lack an inventive step under PCT Article 33(3) as being obvious over Grossman [6,285,137] in view of Tomiita [5,476,636] and further in view of Kashima [4,817,447]. As per claim 19, Grossman [6,285,137] teaches a weathering apparatus having a test chamber, a specimen support disposed in the test chamber, a lamp emitting radiation into the test chamber, and a timer in electrical connection with the lamp. See Grossman [6,285,137] abstract, figs. 1-2, col. 1 lines 25-65, col. 2 lines 5-50, col. 3 lines 5-67, col. 4 lines 15-45, col. 5 liens 5-25, 60-65, and col. 6 lines 1-5. However, it does not explicitly teach an air heater in communication with the test chamber and a fluid dispenser, a method for creating the effect of a corrosive solution on a test specimen, the method further comprising positioning the test specimen at least at least substantially horizontally on the specimen.

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Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

Tomiita [5,476,636] does teach an air heater in communication with the test chamber and a fluid dispenser, a method for creating the effect of a corrosive solution on a test specimen, the method further comprising positioning the test specimen at least at least substantially horizontally on the specimen. See Tomiita [5,476,636] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 20-67, col. 4 lines 1-60, col. 5 lines 1-67, col. 7 lines 1-10, and col. 9 lines 1-12. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an air heater in communication with the test chamber and a fluid dispenser, a method for creating the effect of a corrosive solution on a test specimen, the method further comprising positioning the test specimen at least at least substantially horizontally on the specimen in order to allow one to control the temperature and humidity about a set point. However, neither Grossman [6,285,137] nor Tomiita [5,476,636] explicitly teach a temperature sensor disposed adjacent the test chamber. Kashima [4,817,447] does teach a temperature sensor disposed adjacent the test chamber. See Kashima [4,817,447] abstract, figs. 1,10, col. 2 lines 40-68, col. 3 lines 20-40, col. 6 lines 25-25, 50-65, col. 7 lines 1-45, 50-67, col. 8 lines 60-68, and col. 11 lines 25-60. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a temperature sensor disposed adjacent the test chamber in order to aid one in providing a stable (specific) temperature about a set point, so as to simulate weather conditions at specific temperatures.

As per claim 20,Tomiita [5,476,636] teaches the step of wetting further comprises spraying the test specimen with the corrosive solution. See Tomiita [5,476,636] col. 5 lines 10-21, 45-55, col. 7 lines 1-5, and col. 9 lines 1-10.

As per claim 21, Tomiita [5,476,636] teaches wetting the test specimen with water. See Tomiita [5,476,636] col. 3 line 60 - col. 4 line 5.

As per claim 22, Tomiita [5,476,636] teaches the step of controlled drying further comprises controlling the air temperature in the test chamber. See Tomiita [5,476,636] col. 4 lines 5-10, 54-60.

As per claim 23, Tomiita [5,476,636] teaches the step of cycling the air temperature in the test chamber between at least two temperatures. See Tomiita [5,476,636] col. 4 lines 5-10, 30-35, and 60-65.

As per claim 28, Tomiita [5,476,636] teaches the step of controlled drying further comprises controlling the relative humidity inside the test chamber. See Tomiita [5,476,636] col. 4 lines 50-60.

As per claim 29, Tomiita [5,476,636] teaches the step of selectively emitting radiation further comprises emitting UV radiation. See Tomiita [5,476,636] col. 2 lines 25-30, 40-51, and col. 5 lines 15-21.

As per claim 30, Grossman [6,285,137] teaches the step of selectively emitting radiation further comprises cycling the lamp in dark and light cycles. See Grossman [6,285,137] col. 4 lines 44-67, and col. 5 lines 1-25.

As per claim 31, Tomiita [5,476,636] teaches the step of wetting the test specimen comprises wetting the test specimen with a solution that simulates acid rain. See Tomiita [5,476,636] col. 3 line 60 - col. 4 line 5, and col. 5 line 48-52.

Claims 24-25,27 an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Tikhtman [5,646,358]. As per claim 24, the prior art teaches all aspects of the claim except for explicitly stating that the step of controlled drying further comprises controlling the black panel temperature in the test chamber. Tikhtman [5,646,358] teaches that the step of controlled drying further comprises controlling the black panel temperature in the test chamber. See Tikhtman [5,646,358] col. 2 line 60 - col. 3 line 8, col. 7 lines 1-10, col. 8 lines 30-50, col. 9 lines 35-47, and col. 10 lines 1-15. Therefore it would have been obvious to have step of controlled drying further comprises controlling the black panel temperature in the test chamber in order to aid in determining the actual temperature of the sample during testing.

As per claim 25, Tikhtman [5,646,358] teaches the step of controlled drying further comprises cycling the black panel temperature between at least two temperatures. See Tikhtman [5,646,358] col. 2 line 60 - col. 3 line 8, col. 7 lines 1-10, col. 8 lines 30-50, col. 9 lines 35-47, and col. 10 lines 1-15.

As per claim 27, Tikhtman [5,646,358] teaches the step of controlled drying further comprises controlling the air temperature and the black panel temperature in the test chamber using a blower and damper system. See Tikhtman [5,646,358] col. 2 line 60 - col. 3 line 8, col. 7 lines 1-10, col. 8 lines 30-50, col. 9 lines 35-47, and col. 10 lines 1-15.

Claims 32-34 lack an inventive step under PCT Article 33(3) as being obvious over Grossman [6,285,137] in view of Tomiita [5;476,636] and further in view of Tikhtman [5,646,358]. As per claim 32, Grossman [6,285,137] teaches a test chamber, a lamp powered by a ballast, a specimen support disposed in the test chamber for supporting an associated test specimen in at least a substantially horizontal orientation, wherein the specimen support is disposed in relation to the lamp such that radiation emitted from the lamp contacts the associated specimen supported by the specimen support. See Grossman [6,285,137] abstract, figs. 1-2, col. 1 lines 25-65, col. 2 lines 5-50, col. 3 lines 5-67, col. 4 lines 15-45, col. 5 liens 5-25, 60-65, and col. 6 lines 1-5. However, Grossman [6,285,137] does not explicitly teach a humidifier in fluid communication with the test chamber and a blower system in communication with the test chamber. Tomiita [5,646,358] does teach a humidifier in fluid communication with the test chamber and a blower system in communication with the test chamber. It also teaches an air heater in communication with the test chamber and a method for accelerated weather testing of a test specimen, the method comprising positioning a test specimen in the test chamber, wetting the test specimen in the test chamber, selecting a desired chamber air temperature, selecting a desired chamber relative humidity, sensing the chamber air temperature, sensing the chamber relative humidity, comparing the sensed chamber air temperature to the desired chamber air temperature, and in response to the comparing steps, adjusting the blower system. See Tomiita [5,646,358] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 35-68, col. 4 lines 1-65, col. 5 lines 1-67, col. 6 lines 10-20, 30-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a humidifier in fluid communication with the test chamber and a blower system in communication with the test chamber in order to aid in maintaining the proper humidity in the chamber during testing. However, neither Grossman [6,285,137] nor Tomiita [5,476,636] explicitly teach a black panel temperature sensor disposed in the test chamber, selecting a desired black panel temperature, sensing the black panel temperature, and comparing the sensed black panel temperature to the desired black panel temperature. Tikhtman [5,646,358] does

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Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

teach this. See Tikhtman [5,646,358] col. 2 line 60 - col. 3 line 8, col. 7 lines 1-10, col. 8 lines 30-50, col. 9 lines 35-47, and col. 10 lines 1-15. Therefore it would have been obvious to have a black panel temperature sensor disposed in the test chamber, selecting a desired black panel temperature, sensing the black panel temperature, and comparing the sensed black panel temperature to the desired black panel temperature in order to aid in determining the actual temperature of the sample during testing.

As per claim 33, Tomiita [5,476,636] teaches the positioning step comprises positioning the test specimen less than about 15 degrees from the horizontal. See Tomiita [5,476,636] col. 3 lines 40-47.

As per claim 34, Tomiita [5,476,636] teaches comparing the sensed chamber relative humidity to the desired relative humidity and adjusting the humidifier in response thereto. See Tomiita [5,646,358] abstract, fig. 1, col. 2 lines 10-60, col. 3 lines 35-68, col. 4 lines 1-65, col. 5 lines 1-67, col. 6 lines 10-20, 30-35.

Claims 12,26 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the controller communicating with one of the two blowers to control the blower in response to data received from the black panel sensor and the controller communicating with the other one of the two blowers to control the other blower in response to data received from the air temperature sensor.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

(i) the claim is unchanged;

(ii) the claim is cancelled;

(iii) the claim is new;

(iv) the claim replaces one or more claims as filed;

(v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."

2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."

3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." **or**
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."

4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under Article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see the *PCT Applicant's Guide*, Volume II.

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article," "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended ?

Under Article 19, only the claims may be amended

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Preliminary Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When ? Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments ?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How ? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments ?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.